

REMARKS

The above amendments and following remarks are submitted in response to the Official Action of the Examiner mailed August 19, 2004 (i.e., Paper No. 2). Having addressed all objections and grounds of rejection, originally presented claims 1-20, along with newly presented claims 21-25, being all the pending claims, are now deemed in condition for allowance. Reconsideration to that end is respectfully requested.

The Examiner has objected to the specification as containing "hyperlinks and/or other form of browser-executable code". This ground of objection is respectfully traversed. Page 34 contains examples of the format of potential hyperlinks, but it does not contain any specific hyperlinks. Applicants do not object to amending the specification in a reasonable fashion if recommended by the Examiner. However, they are concerned that such modifications do not detract from the totality of the disclosure of the preferred modes of practicing Applicants' invention.

The specification has been amended above to include the serial number and filing date of a cross-referenced, co-pending, commonly assigned, application in response to the Examiner's objection.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,366,934, issued to Cheng et al (hereinafter referred to as "Cheng") in view of U.S. Patent No. 6,721,727, issued to Chau et al (hereinafter referred to as "Chau"). This ground of rejection is respectfully traversed as to amended claims 1-20 for failure of the Examiner to present a *prima facie* case of obviousness as required by MPEP 2143.

To meet his burden under MPEP 2143, the Examiner must present evidence of three elements: 1) motivation to make the alleged combination; 2) reasonable likelihood of success of the alleged combination; and 3) presence of all claim elements within the alleged combination. As explained in detail below, the Examiner has not met his obligation.

Cheng is dedicated to a technique for "Querying Structured Documents"¹. In other words, Cheng is concerned with providing an efficient way to search a data base containing XML documents. Fig. 1 of Cheng clearly shows that File System 500 specifically comprises XML documents. Though Cheng provides indexing and other techniques for searching the XML document data base, the data is entered, stored, searched, and queried as XML documents. Thus, Cheng has no interest in conversion between XML documents and other data formats because it only handles XML documents.

¹See Title.

Chau is also dedicated to showing how to construct and search a relational data base containing XML documents. This is apparent from the title, "XML DOCUMENT STORED AS COLUMN DATA", and from the abstract which begins:

A technique is provided for creating metadata for fast search of XML documents stored as column data.

That means that Chau's attention is limited to storing data from an XML message into the relational data base and retrieving data from that relational data base for packing into an XML message. In other words, Chau is limited to transferring data from the XML message to the relational data base and transferring data from the relational data base to an XML message. The important thing, however, is that Chau has no interest in conversion between XML and other formats. Chau receives data in XML document format, stores data in XML document format, searches data in XML document format, and communicates in XML document format.

Applicants' invention, on the other hand, provides a technique for transferring XML documents from a user terminal to a legacy data base management system for storage in a legacy data base which is not compatible with XML format. This of necessity means that a conversion is required. Applicants describe the Field of the Invention (see specification at page 1, lines 11-13) as:

The present invention generally relates to data base management systems and more particularly relates to enhancements for providing an interface between a

legacy data base management system and Internet servers employing XML (extensible markup language) protocol

The initiating transfer between a user and a legacy data base management system involves the transfer of an XML document. This XML document cannot be entered into the legacy data base by definition because the legacy data base does not accept XML documents.

As a result conversion of the XML document to data which can be stored in the legacy data base is required by Applicants' preferred embodiments and is limiting of all pending claims. Additional claim limitations specify certain structural aspects of this conversion process.

Thus, both Cheng and Chau search data bases of XML documents whereas Applicants must convert XML documents generated by the user terminal into a format suitable for storage within the legacy data base.

Because the Examiner has apparently not found this distinction within Applicants' claims as presented, Applicants have herein slightly amended the pending claims to make this distinction much more explicit.

Though the Examiner has surprisingly found most of the limitations of the pending claims to be in Cheng, he does admit:

Cheng et al. does not explicitly teach publically accessible digital data communication network.

This conclusion is readily apparent from the disclosure of Cheng, which not only does not have a "publically accessible digital data communication network", it has no network at all. In fact, the preferred embodiment of Cheng is all implemented within a single computer. This is clearly shown in Fig. 7 as Computer System 702, with Fig. 7 described at column 4, lines 46-47:

FIG. 7 is an exemplary computer hardware environment for use in accordance with the present invention.

Cheng prefers to completely practice its invention within a single computer. Thus, it is unthinkable that one reading Cheng would be motivated to incorporate a "publically accessible digital data communication network" in the system of Cheng.

Nevertheless, the Examiner states:

Chau et al. teaches publically accessible digital data communication network) (i.e. Internet) (Chau et al. col. 4, lines 10-23). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Chang et al. wherein the network is publically accessible digital data communication network.

In other words, because Applicants have such a network, it is obvious for Cheng to have one, even though Cheng does not appear to see the need for any network. This is precisely the unsupported conclusion attacked by the Court of Appeals for the Federal Circuit stating in part:

Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence". *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999).

The Examiner continues:

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cheng et al. by the teaching of Chau et al. because providing the publically accessible digital data communication network allows the improved technique of selecting, retrieving, and storing relational data into XML documents as taught by Chau et al. (Chau et al. col. 2, lines 36 to 38).

Not only is this statement clearly erroneous as a matter of fact and incorrect as a matter of law, it makes no sense. Cheng already performs "selecting, retrieving, and storing relation data into XML documents" (see Fig. 7, for example). Furthermore, Cheng accomplishes these tasks within a single computer (i.e., Computer System 702) without the need for any network at all.

The Examiner has failed to show motivation as required by MPEP 2143. In addition, the Examiner has not even addressed his obligation to show reasonable likelihood of success. He has not even explained where it would be obvious to connect the Internet to the system of Fig. 7. Having failed in the first two showings, the Examiner also fails to show all of the claim elements within the alleged combination.

Specifically, with regard to claim 1, the Examiner states:

As to claim 1, Cheng et al. discloses a data processing system having a user terminal coupled to a data hale (sic) management system via a publically accessible digital data communication network....

This finding is clearly erroneous. Cheng has no separate "user terminal" and "data base management system". As explained above, Fig. 7 of Cheng clearly shows all of the functionality within a

single computer, Computer System 702. To further assist the Examiner, claim 1 has been amended to indicate that the data base management system has a data base which is not compatible with the XML format. Cheng certainly does not have this feature.

Element a of the improvement requires that the XML document be generated by the user terminal and transferred to the data base management system over the network. Cheng has no user terminal and has no network. Cheng cannot meet this claim element.

Element b of the improvement, as amended, requires that the DTD be transferred from the user terminal to the data base management system. Again, Cheng cannot meet this limitation.

The XML mapping tree of element c, as amended, provides for disassembly of the XML document for storage in the legacy data base. The Examiner does not address this limitation but rather is concerned with "parse the DTD" to "store DTD data into the XML_DTD_REF table". This finding is both clearly erroneous and legally irrelevant.

Having failed to make any of the three showings required by MPEP 2143, the rejection of claim 1, and all claims depending therefrom, is respectfully traversed.

Claim 2 depends from claim 1 and further limits the "plurality of elements" of the XML document. The Examiner again refuses to address the claim limitation. Therefore, the

rejection is legally irrelevant. The rejection of claim 2 is respectfully traversed.

Claim 3 depends from claim 2 and further requires transfer of the DTD from the user terminal to the data base management system. The Examiner ignores this limitation and cites Cheng, column 14, lines 35-47, which has nothing to do with transfer of the DTD. The rejection of claim 3 is respectfully traversed.

Claim 4 depends from claim 3 and is further limited by storage for the XML mapping tree. Instead of addressing the actual limitation, the Examiner states that "...the DTD is stored for future use...". This finding is both clearly erroneous and legally irrelevant. The rejection of claim 4 is respectfully traversed.

Claim 5 depends from claim 4 and is further limited by a window which displays the DTD location path on the user terminal. Cheng has no user terminal, no window, and no DTD location path. Therefore, the Examiner supports his rejection with a clearly erroneous finding of fact and a legally irrelevant citation. The rejection of claim 5 is respectfully traversed.

Claim 6 is an independent apparatus claim having five elements. Cheng does not have element c, as admitted by the Examiner. Cheng also does not have elements d or e. The Examiner's attention is again directed to Fig. 1 wherein the data base of Cheng is specifically XML documents. The rejection of

claim 6, and all claims depending therefrom, is respectfully traversed.

Claim 7 depends from claim 6 and is further limiting of the XML mapping tree. The alleged combination has no XML mapping tree. The rejection of claim 7 is respectfully traversed.

Claim 8 depends from claim 7. The alleged combination does not have the limitations of claim 6 or 7. Therefore, it cannot have the combination with the unique additional limitations of claim 8. The rejection of claim 8 is respectfully traversed.

Claim 9 depends from claim 8 and is further limited by the data base management system receiving the DTD. The alleged combination cannot meet this limitation as discussed above. The rejection of claim 9 is respectfully traversed.

Claim 10 depends from claim 9. The alleged combination does not have the limitations of the claims from which it depends. Therefore, the alleged combination cannot meet the unique limitations of claim 10. The rejection of claim 10 is respectfully traversed.

Claim 11 is an independent method claim having three steps. The Examiner begins his rejection with the clearly erroneous statement:

As to claim 11, Cheng et al. as modified teaches a method of interfacing an XML document to a data base management system having an incompatible input protocol.

This finding is clearly erroneous because the entire system of Cheng is compatible with XML documents (See Fig. 1).

Cheng has no "transferring" step as all of the functionality is within the single computer, Computer System 702. The second step requires "parsing of the XML document". Because the alleged combination does not have this step, the Examiner states that Cheng "parses the DTD". Surely, the Examiner can appreciate the distinction. The third step requires processing of the parsed XML document. The alleged combination may have a parsed DTD, but it clearly has no parsed XML document. As a result, the alleged combination has none of the three claimed steps. The rejection of claim 11, and all claims depending therefrom, is respectfully traversed.

Claim 12 depends from claim 11 and requires the further step of storing the XML element tree. The alleged combination does not meet this limitation. Therefore, the Examiner alleges that Cheng stores the DTD data. Surely the Examiner can distinguish. The rejection of claim 12 is respectfully traversed.

Claim 13 depends from claim 12 and is further limited by retrieval of the stored XML element tree. The alleged combination has no XML element tree; cannot store the XML element tree (because it has none); and therefore, cannot retrieve the XML element tree. The rejection of claim 13 is respectfully traversed.

Claim 14 depends from claim 13 and contains additional unique limitations. The alleged combination does not have the elements of the claims from which it depends. Therefore, the alleged combination cannot meet the unique limitations of claim 14. The rejection of claim 14 is respectfully traversed.

Claim 15 depends from claim 14 and contains additional unique limitations. The alleged combination does not have the elements of the claims from which it depends. Therefore, the alleged combination cannot meet the unique limitations of claim 15. The rejection of claim 15 is respectfully traversed.

Claim 16 is an independent apparatus claim having four "means-plus-function" claim elements. As such, it is to be examined in accordance with MPEP 2181 et seq. Though Chau off-handedly mentions the Internet at the cited column 5, lines 50-52, it says nothing of the claim limitation of "means for transmitting an XML document". The alleged combination does not have a "means for providing data base management services". The alleged combination has no "composing means". Both Cheng and Chau handle, store, and retrieve only XML documents. Therefore, the rejection of claim 16, and all claims depending therefrom, is respectfully traversed.

Claim 17, as amended, depends from claim 16 and is further limited by "storing means for storing the parsed XML document". The alleged combination does not have this element and the

Examiner does not suggest that it does. The rejection of claim 17 is respectfully traversed.

Claim 18 depends from claim 17 and is further limited by details of the XML document. The alleged combination does not have the limitations of the claims from which claim 18 depends. Therefore, the alleged combination cannot have the unique combination of claim 18. The rejection of claim 18 is respectfully traversed.

Claim 19 depends from claim 18 and further limits the "transmitting means". The alleged combination does not have the "transmitting means" as claimed. Therefore, it does not have the further limitations of claim 19. The rejection of claim 19 is respectfully traversed.

Claim 20 depending from claim 19 and adds the further limitation of the "displaying means for displaying a pathway for said DTD storage location". The alleged combination does not have these elements. The rejection of claim 20 is respectfully traversed.

Newly presented claims 21-25, though of differing scope, are deemed similarly limited.

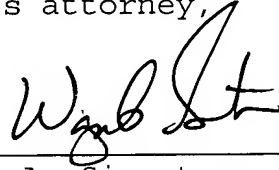
Having thus responded to each objection and ground of rejection, Applicants respectfully request entry of this amendment and allowance of claims 1-25, being the only pending claims.

Please charge any deficiencies or credit any overpayment to
Deposit Account No. 14-0620.

Respectfully submitted,

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By his attorney,



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